

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A device for the automatic opening and closing of one or more reaction vessels, comprising:

a holding device for the capable of non-rotatable holding of one or more reaction vessels, wherein the holding device has a clamping mechanism to clamp and hold the one or more reaction vessels, the holding device comprising:

three perforated plates arranged one above the other as a bottom plate, a middle plate and a top plate, each of the perforated plates having a plurality of openings to hold the one or more reaction vessels,

the top plate and the bottom plate being fixed in a stationary position with the openings in the top plate directly aligned with the openings in the bottom plate, the middle plate being capable of sliding in a longitudinal direction between a first position in which the openings in the middle plate are aligned with the openings of the top plate and the bottom plate, and a second position in which the openings in the middle plate are arranged offset relative to the openings of the top plate and bottom plate,

whereby when the middle plate is in the first position the one or more reaction vessels can be inserted into or removed from the openings of the perforated plates, and when the middle plate is in the second position the middle plate presses and immobilizes the one or more reaction vessels in the holding device, and

a means for moving and fixing the middle plate in the second position;

a gripper for the capable of gripping of a lid for of one of the reaction vessels, wherein the gripper has gripping jaws comprising a gripping surface effective to take hold of the lid, and the gripper has no active operating device for opening and closing the gripping jaws, wherein the gripping jaws are arranged so that the lid can be inserted between the gripping jaws, and the lid is held by the gripping jaws through frictional contact; and

a rotating mechanism for rotatable holding of the gripper; to which the gripper is attached, whereby the rotating mechanism can apply torque to the gripper and therefore to the lid when held by the gripping jaws, resulting in the opening and closing of the one or more reaction vessels.

wherein the gripping jaws are arranged so that, when the lid is inserted into the area between the gripping jaws, it is held by the gripping jaws through frictional contact.

2. (Currently Amended) The device according to claim 1, wherein the gripping jaws have comprise insertion slopes that adjoin the lower edge of the gripping surface.
3. (Currently Amended) The device according to claim 1, wherein the gripping jaws have on their gripping surface surfaces comprises one or more cutting webs running at right-angles to the direction of rotation.
4. (Currently Amended) The device according to claim 3, wherein the height by which the one or more cutting webs project projects beyond the gripping surface is less than the wall thickness of the one or more reaction vessels.

9. (Currently Amended) The device according to claim 17, wherein the middle perforated plate contains a plurality of projections each extending into the interior of each of the plurality of an openings, each projection being located at an edge of the opening at the intersection of the central axis of the opening and the boundary edge of the opening at the longitudinal direction of sliding, in the section area between a centre line of the opening running in the direction of sliding, and the edge of the opening.

10. (Currently Amended) The device according to claim 9, wherein the top plate and/or the bottom perforated plate contains a plurality of projections each extending into the interior of each of the plurality of an openings, each projection being and is arranged opposite the projection of the corresponding opening of the middle perforated plate.

11.-13. Cancelled